

according to him accompany even uncomplicated cases as tending to break down the protective barriers of a dormant tuberculous lesion. He points out that this tendency is much more marked in the instance of influenza and influenzal pneumonias than it is in ordinary lobar and bronchopneumonias. A second factor is that of lowered resistance, based on the negative von Pirquet reaction found during and for some weeks after influenza, a condition likewise obtaining in measles. The author does not mention the possibility of increased susceptibility to primary infection as a factor in postinfluenzal tuberculosis.

**Agglutination in Influenza.**—UTTIEIM (*Jour. Infect. Dis.*, 1920, xxvii, 460) studied the sera of patients with influenza as to whether the serum of the patient would agglutinate the influenza bacillus obtained from the same patient and whether agglutination would take place with heterologous strains. The antigen consisted of cultures isolated from the nose or throat and suspended in salt solution. After thorough shaking, a homogeneous emulsion was usually obtained, spontaneous clumping occurring in only one instance. Thirty strains were isolated from as many patients and tested with the serum from these patients during different stages of the disease. It was found that 11 gave a positive agglutination with their own bacilli, 6 in a dilution of 1 in 160, 4 in 1 in 60, and 1 in 1 in 20. With the exception of one strain, which gave an agglutination of 1 in 40 with 3 sera of other patients, no cross agglutination was encountered in any serum tested. The blood of 9 patients was examined during different stages of the disease; 8 showed a constantly negative result, while in 1 instance the agglutination became positive in a dilution of 1 in 80 in the convalescent stage. Three strains were isolated from the throat of 1 patient, only 1 of which gave agglutination with the patient's serum. Seven of the 11 which gave agglutination with the homologous strain occurred in uncomplicated influenza and 4 in influenza pneumonia. Of the remaining 19 negative cases, 10 had pneumonia.

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## THERAPEUTICS

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UNDER THE CHARGE OF

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**The Use of a High Fat Diet in the Treatment of Diabetes Mellitus. Second Paper: Blood Sugar.**—NEWBURGH and MARSH (*Arch. Int. Med.*, 1921, xxvii, 699) supplement a previous communication (*Arch. Int. Med.*, 1920, xxvi, 625) in which they reported briefly the

results of an investigation of the effects of a diet whose energy came largely from fat, to which was added sufficient protein to maintain nitrogen balance, and the minimal carbohydrate necessitated in making up a diet that a human being can eat over a long period of time. It was shown that with such a diet glycosuria was avoided in severe diabetes and that acidosis was not produced. The present paper presents the blood-sugar determinations in 45 cases treated by this method. All but 5 more or less promptly responded with a reduction of the blood sugar to within normal limits. Of the 5 which did not reach a desirably low percentage 2 were suffering from severe complicating diseases and 1 was suspected of not adhering to his diet.

**Dermatitis and Allied Reactions Following the Arsenical Treatment of Syphilis.**—A detailed review is given by MOORE and KEIDEL (*Arch. Int. Med.*, 1921, xxvii, 716) of 23 cases of dermatitis and allied reactions following arsenical treatment which have occurred during the last six years in the syphilis department and in the wards of the Johns Hopkins Hospital and in the private practice of the authors. Five of the 23 cases terminated fatally. From the evidence presented it appears that the lesions of syphilis and the duration of the disease exercise no modifying influence upon the dermatitis. Dosage, technic of administration, impurities in the drug and the type of chemotherapeutic arsenic compound can be excluded as etiological factors. Reactions of this group tend to appear early in the course of treatment. The lesions may be classified, on the basis of the constitutional manifestations and their importance, as mild or severe. In the mild group fall urticaria and erythematous and herpetic rashes. In the severe group are macular, maculo-papular and exfoliative rashes, itching and stomatitis. In some cases certain prodromal symptoms may be recognized; itching, mild or fleeting skin eruptions, prolonged fever or marked malaise. The occurrence of any of these during the use of arsenical products should lead to a suspension of treatment and a general survey of the patient. Urticaria is fairly common in association with the nitritoid crisis, is not accompanied by the more severe constitutional manifestations and does not contraindicate continuance of arsenical treatment. The authors call attention to characteristic alterations in the blood picture, which were present in 14 of the 16 cases studied. The changes consist, in general, of leukopenia, decrease in polymorphonuclear neutrophils, eosinophilia, increase of the large mononuclear-transitional group and the appearance of many fragile cells. The complications of dermatitis exfoliativa, including acute nephritis, polyneuritis, jaundice, skin infection, bronchopneumonia and septicemia, are discussed. In considering the possible etiological factors in reactions of this group the authors cite Auer's recent work and agree that arsphenamine may lower the local threshold for an unknown antigen which in its turn causes an anaphylactic reaction, and thus may cause the deposit of arsenic in the structures where its toxic action is observed, notably in the bone-marrow and in the skin.

**Fatal Chronic Nephritis in a Fourteen-year-old Girl with only One Kidney and a History of Scarlet Fever.**—PEPPEN and LUCKE (*Arch. Int. Med.*, 1921, xxvi, 661) report a careful clinicopathological study